

**PATENT** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Application No.:** 

US National Phase of PCT/JP2005/012728

Filing Date:

(International) July 5, 2005

Applicant:

Masayuki IKEDA

Group Art Unit:

Not yet assigned

Examiner:

Not yet assigned

Title:

**ELECTRONIC APPARATUS AND WIRELESS** 

**COMMUNICATION TERMINAL** 

Attorney Docket:

9319S-001760/US/NP

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

#### **INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

#### I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were

Attorney Docket No. 93 195-06 760/US/NP IAP9 Rec'd PCT/PTO 31 AUG 2016

previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

III.

IV.

U.S. Filing Date

C. This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)
CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)
A.   Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).
B. $\boxtimes$ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):
1.⊠See the attached foreign patent office communication regarding a related foreign application in:
International Search Report for PCT/JP2005/012728, mailed 10/17/2005; Written Opinion of ISA/EP, mailed 10/17/2005, and Japanese Search Report for JP 2004-367203, mailed May 24, 2006
2. English translations are provided as follows:
As indicated on attached Form 1449.
3. Other:
C.  The following additional information is provided for the Examiner's consideration: Document 5 in "Other Documents" is discussed on pages 3 and 6 of the Specification. Document 6 is discussed on page 28 of the Specification.
CROSS REFERENCE TO RELATED APPLICATION(S)
A. The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By

10/591206 Attorney Ducket IND. 93193-001700/US/NP

### IAP9 Rec'd PCT/PTO 3 1 AUG 2006

bringing this(these) application(s) to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. § 122.

	Serial No.	Filing Date	Inventor(s)	
V.	THIS IDS IS BEING F	ILED UNDER		
	A.  37 C.F.R. § 1.97	7(b): (check only one box	)	
	other than a o		date of a national application under § 1.53(d) on is required.	
	set forth in §	ee months of the date of 1.491 in an internatio fee or certification is requ	entry of the national stagenal application (37 C.F.Fuired.	e as २.  §
	§ 1.97(b)(3)). Note: Action of the under 37 C.F.F. 1.97(e) below;	No fee or certification is re n the merits has been is: R. § 1.97(c) and see the or, if no certification has b	Action on the merits (37 C. equired. In the event that a sued, please consider this certification under 37 C.F. been made, charge our dep of as required by 37 C.F.	first IDS R. § posit
		tinued examination under	ce Action after the filing or 37 C.F.R. § 1.114. No fe	
	В. <b>37 С.F.R. § 1.9</b> 7	<b>7(c):</b> (check <u>only</u> one box)	1	
	§ 1.113, a Noti		al Office Action under 37 C 7 C.F.R. § 1.311, or an ac	
		ication; therefore, a fee C.F.R. § 1.17(p).	in the amount of \$180.0	0 is
	2.  See the c	ertification below. No fee	is required.	
	C. 37 C.F.R. § 1.97	7(d):		
			Office Action under 37 C.F. 37 C.F.R. § 1.311, yet o	

1. See the certification below. A fee in the amount of \$180.00 is

before payment of the issue fee.

required by 37 C.F.R. § 1.17(p).

### 10/591206

# Attorney Docket No. 9319S-001760/US/NP IAP9 Rec'd PCT/PTO 3 1 AUG 2006

#### CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box) VI.

	The undersigned hereby certifies that:
	A. $\square$ each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or
	B.  no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. 1.704(d)
	The undersigned hereby states that:
	each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R § 1.56(c) more than thirty days prior to the filing of this IDS.
VIII.	PAYMENT OF FEES (check only one box, if applicable)
	A. $\square$ A check in the amount of \$180.00 is enclosed for the above-identified fee.
	B. $\square$ Please charge Deposit Account No. 50-3213 in the amount of \$180.00 for the above-identified fee.
C.F.R	Please charge any additional fees or credit any overpayment pursuant to 37 . § 1.16 or § 1.17 to Deposit Account No. 50-3213 (Epson R&D).

10/591206 Attorney Docket No. 9319S-001760/US/NP

IAP9 Rec'd PCT/PTO 31 AUG 2006

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-3213 (Epson R&D).

Respectfully submitted,

Dated: August 3/, 2006

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

GGS/dI

### 10/591206 1AP9 Rec'd PCT/PTO 31 AUG 2006

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 1 of 2

ATTORNEY DOCKET No.	SERIAL NO.
9319S-001760/US/NP	
APPLICANT	
Masayuki IKEDA	
FILING DATE	GROUP

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		6,640,113 B1	10-28-2003	Shim et al		
2.		6,424,820 B1	07-23-2002	Burdick et al		
3.		2001/018,351 A1	08-30-2001	Hino et al		
4.		2005/192,048 A1	09-01-2005	Bridgelall		
5.		6,895,255 B1	05-17-2005	Bridgelall		

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translatio Yes	n No
1.		1128644 A	07-29-2002	EP		N/A	
2.		1199842 A	04-24-2002	EP		N/A	
3.		08-046416	02-16-1996	JP		Abst.	
4.		2004-343265	12-02-2004	JP		Abst.	
5.		2003-218315	07-31-2003	JP		Abst.	
6.		10-256478	09-25-1998	JP		Abst.	
7.		04-025046	01-28-1992	JP		Abst.	
8.		2000-012406	01-14-2000	JP		Abst.	
9.		2000-068904	03-03-2000	JP		Abst.	
10.		2003-101320	04-04-2003	JP		Abst.	
11.		2000-124406	04-28-2000	JP		Abst.	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)				
Ref. Desig.	Examiner's Initials			
1.		Search Report for PCT/JP2005/012728, ISA/EP, Rijswijk, mailed October 17, 2005		
2.		Written Opinion of the International Searching Authority for PCT/JP2005/012728, PCT/ISA/237 (in English), ISA/EP, Rijswijk, mailed October 17, 2005,		

Examiner:	Date Considered:	
-----------	------------------	--

## 10/591206

# IAP9 Rec'd PCT/PTO 3 1 AUG 2006

FORM HDP-1449 (Based on Form PTO-1449)

### PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

1/1 1 110 @ =000		
ATTORNEY DOCKET No.	SERIAL NO.	
9319S-001760/US/NP		
APPLICANT		
Masayuki IKEDA		
FILING DATE	GROUP	

	R DOCUMENTS (including Author, Title, Date, Perlinent Pages, etc.))
4.	CHU, L. J., "Physical Limitations of Omni-Directional Antennas," Journal of Applied Physics, Vol. 19, Dec., 1948, pp. 1163-1175.
5.	NIKKEI MICRODEVICE, December, 2003, p. 161. *
6.	MCLEAN, J.S., "A Re-Examination of the Fundamental Limits on the Radiation Q of Electrically Small Antennas," IEEE Trans. Antennas Propagation, Vol.44, pp. 672-676, 1996.*

<sup>\*</sup> Note: To be supplied at a later date.

# Best Available Copy

Examiner:	•	Date Considered: